

Lake Almanor Valley Groundwater Basin

- Groundwater Basin Number: 5-7
- County: Plumas
- Surface Area: 7,150 acres (11 square miles)

Basin Boundaries and Hydrology

The Lake Almanor Valley Groundwater Basin is located along the northwest shore of Lake Almanor and consists of Quaternary lake deposits and Pleistocene non-marine sediments. The basin is bounded by Lake Almanor to the southeast and bounded on all other sides by Pliocene basalt. Annual precipitation in the basin ranges from 31- to 37-inches, increasing to the northwest.

Hydrogeologic Information

Hydrologic information was not available for the following:

Water-Bearing Formations

Groundwater Level Trends

Groundwater Storage

DWR (1960) estimates the storage capacity to be 45,000 acre-feet for a saturated depth interval of 10 to 210-feet.

Groundwater Budget (Type B)

The estimate of groundwater extraction for the Lake Almanor Valley Basin is based on a 1997 survey conducted by the California Department of Water Resources. The survey included landuse and sources of water. Groundwater extraction for municipal and industrial uses is estimated to be 740 acre-feet. Deep percolation of applied water is estimated to be 690 acre-feet.

Groundwater Quality

Characterization. Calcium bicarbonate is the predominant groundwater type in the basin. Total dissolved solids concentrations range from 53- to 260-mg/L, averaging 105 mg/L.

Impairments. Groundwater in the basin has locally high copper, iron, lead, manganese, calcium and boron.

Water Quality in Public Supply Wells

Constituent Group ¹	Number of wells sampled ²	Number of wells with a concentration above an MCL ³
Inorganics – Primary	3	0
Radiological	3	0
Nitrates	3	0
Pesticides	3	0
VOCs and SVOCs	3	0
Inorganics – Secondary	3	0

¹ A description of each member in the constituent groups and a generalized discussion of the relevance of these groups are included in *California's Groundwater – Bulletin 118* by DWR (2003).

² Represents distinct number of wells sampled as required under DHS Title 22 program from 1994 through 2000.

³ Each well reported with a concentration above an MCL was confirmed with a second detection above an MCL. This information is intended as an indicator of the types of activities that cause contamination in a given basin. It represents the water quality at the sample location. It does not indicate the water quality delivered to the consumer. More detailed drinking water quality information can be obtained from the local water purveyor and its annual Consumer Confidence Report.

Well Characteristics

Well yields (gal/min)	
Municipal/Irrigation	NKD
Total depths (ft)	
Domestic	Range: 19 – 106 Average: 55 (18 Well Completion Reports)
Municipal/Irrigation	Range: 94 – 100 Average: 97 (2 Well Completion Reports)

NKD – No known data

Active Monitoring Data

Agency	Parameter	Number of wells /measurement frequency
DWR	Groundwater levels	10 wells semi-annually
DWR	Miscellaneous water quality	4 wells biennially
Department of Health Services	Miscellaneous water quality	4

Basin Management

Groundwater management:	No known groundwater management plans, groundwater ordinances, or basin adjudications
Water agencies	
Public	Chester PUD
Private	

Selected References

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Dickinson WR, Ingersoll RV, Graham SA. 1979. Paleogene Sediment Dispersal and Paleotectonics in Northern California. Geological Society of America Bulletin 90:1458-1528.

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Errata

Changes made to the basin description will be noted here.